



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: BANSAL ET AL Group Art Unit: 2661
Application No.: 10/603,559 Examiner: UNKNOWN
Date Filed: 06/25/2003
Title: METHOD AND APPARATUS FOR POLICY-BASED DYNAMIC
PREEMPTIVE SCHEDULING OF DATA TRANSMISSIONS

CERTIFICATE OF MAILING

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Date of Deposit

MOTOROLA INC.

Name of Assignee

Dawn M. Debeo

SIGNATURE

01/28/2004

DATE

INFORMATION DISCLOSURE STATEMENT (IDS)

Commissioner For Patents
Alexandria, VA 22313

SIR:

In accordance with 37 C.F.R. §1.56 and in compliance with 37 C.F.R. §§1.97 and 1.98, the references listed on attached Form PTO/SB/08 and/or subsequently identified herein, are for consideration by the United States Patent and Trademark Office. Pursuant to the Office waiving the requirement under 37 CFR 1.98 (a)(2)(i) for submitting a copy of each cited U.S. patent and each U.S. patent application publication for all U.S. national patent applications filed after June 30, 2003 and for all international applications that have entered the national stage under 35 USC §371 after June 30, 2003, copies of the reference are not submitted herewith.

I. COPIES

- a. A legible copy of (i) each U.S. and foreign patents; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed, is included herewith.
- b. Any patents, publications or other information which are listed on PTO/SB/08 which are not enclosed herewith were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. §120:

U.S. Serial Number

U.S. Filing Date

II. CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)

- a. Except as may be indicated below in (b) of this section, all of the patents, publications or other information are in the English language (concise explanation not required).
- b. A concise explanation of the relevance of all patents, publications or other information listed that is not in the English language is as follows:
- c. The following additional information is provided for the Examiner's consideration:

III. CROSS REFERENCE TO RELATED APPLICATION(S)

The Examiner is advised that the following co-pending application(s) contain(s) subject matter that may be related to the present application. By bringing this (these) applications to the Examiner's attention, Applicant(s) does(do) not waive the confidentiality provisions of 35 U.S.C. §122.

Serial No.

Filing Date

Art Unit

FEES

IV. THIS IDS IS BEING FILED UNDER 37 C.F.R. §1.97(b): (check one box)

- a. within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) (37 C.F.R. §1.97(b)(1)). No fee or statement is required.
- b. within three months of the date of entry of the national stage as set forth in § 1.491 in an international application (37 C.F.R. §1.97(b)(2)). No fee or statement is required.
- c. before the mailing date of a first Office Action on the merits (37 C.F.R. §1.97(b)(3)). No fee or statement is required.
- d. before the mailing date of a first Office Action after the filing of a request for continued examination under § 1.114 (37 C.F.R. § 1.97(b)(4)). No fee or statement is required.

V. THIS IDS IS BEING FILED UNDER 37 C.F.R. §1.97(c): (check one box)

before the mailing date of any of a Final Office Action under 37 C.F.R. §1.113, a Notice of Allowance under 37 C.F.R. §1.311, or an action that otherwise closes prosecution in the application (See 37 C.F.R. §1.97(c)).

- a. No statement; therefore, charge deposit account 502117 the fee set forth in 37 C.F.R. §1.17(p).
- b. See the statement below. No fee is required.

VI. THIS IDS IS BEING FILED UNDER 37 C.F.R. §1.97(d):

on or before payment of the issue fee and is accompanied by the following:

- 1) a statement under 37 C.F.R. §1.97(e) as provided below; and
- 2) charge deposit account 502117 the petition fee set forth in §1.17(p).

VII. STATEMENT UNDER 37 C.F.R. §1.97(e) (check only one box, if applicable)

The undersigned hereby states that

- a. each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of IDS; or
- b. no item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application, and to knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in the IDS was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement, or
- c. some of the items of information contained in the IDS were cited in a communication from a foreign Patent Office. As to this information, the undersigned states that each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby states that no item of this remaining information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application or, to the knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in the IDS was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement.

VIII. PAYMENT OF FEES

- A check in the amount of _____ is enclosed for the above-identified fee(s).
- Please charge Deposit Account 502117 in the amount of \$180.00 for the above-indicated fee(s).
- If Applicant has overlooked any additional fees, or if any overpayment has been made, the Commissioner is hereby authorized to credit or debit Deposit Account 502117.
- Two Copies of this paper are attached for Deposit Account charges and debits.

The above references are being cited only in the interests of candor and without any admission that they constitute statutory prior art or contain matter which anticipates the invention or which would render the same obvious, either singly or in a combination, to a person of ordinary skill in the art.

If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 502117.

Respectfully submitted,
BANSAL ET AL



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MOTOROLA, INC.
Customer Number 22917

Enclosures: Information Disclosure
 Statement by Applicant
 References
 Foreign Search Report
 Other:



INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				<i>Complete if Known</i>	
				Application Number	10/603,559
				Filing Date	06/25/2003
				First Named Inventor	BANSAL ET AL
				Group Art Unit	2661
				Examiner Name	UNKNOWN
Sheet	1	of	3	Attorney Docket Number	CML00497NR

Examiner Signature		Date Considered	
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation, if not in conformance and not considered. Include copy of this form with next communication to applicant.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>			<i>Complete if Known</i>	
			Application Number	10/603,559
			Filing Date	06/25/2003
			First Named Inventor	BANSAL ET AL
			Group Art Unit	2661
			Examiner Name	UNKNOWN
Sheet	2	of	3	Attorney Docket Number
NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		
		J. Liebeherr and D.E. Wrege, "Priority Queue Schedulers with Approximate Sorting in Output-Buffered Switches," IEEE JSAC, June 1999. ftp://ftp.cs.virginia.edu/pub/jorg/papers/jsac699.pdf		
		H. Zhang, "Service disciplines for guaranteed performance service in packet-switching networks", Proc. IEEE, 83(10):1374--96, Oct. 1995. http://citeseer.nj.nec.com/cache/papers/cs/16973/ftp:zSzzSzftp.cs.utexas.eduSzpubSztechreportszSztr96-02.pdf/goyal96starttime.pdf		
		M. Shreedhar and G. Varghese, "Efficient Fair Queuing Using Deficit Round Robin", 1995. http://citeseer.nj.nec.com/cache/papers/cs/365/ftp:zSzzSzwww.cs.wustl.eduSzcsSztechreportszSz1994zSzwucs-94-17.pdf/shreedhar95efficient.pdf		
		A. Demers, S. Keshav, and S. Shenker, "Analysis and simulation of a fair queuing algorithm", <i>Proc. SIGCOMM'89</i> , pages 1-12, Austin, Texas http://www.acm.org/sigcomm/CCR/archive/1995/jan95/CCR-9501-shenker.pdf		
		S. J. Golestani, "A Self-Clocked Fair Queuing Scheme for Broadband Applications"		
		P. Goyal, H. M. Vin, and H. Cheng, "Start Time Fair Queuing: A Scheduling Algorithm for Integrated Services Packet Switching Networks"		
		D. Stiliadis and A. Verma, "Latency-rate servers: A general model for analysis of traffic scheduling algorithms", <i>IEEE/ACM Transactions on Networking</i> , 6(2):164--174, April 1998. http://citeseer.nj.nec.com/cache/papers/cs/2814/ftp:zSzzSzwww.bell-labs.comSzuserSzstiliadizSzlr.pdf/stiliadis96latencyrate.pdf		
		H. Wang, C. Shen, K. G. Shin, "Adaptive-Weighted Packet Scheduling for Premium Service", http://www.merl.com/papers/TR2001-07/		
		P. Bhagwat, P. Bhattacharya, A. Krishna and S. K. Tripathi, "Enhancing throughput over wireless LANs using Channel State Dependent Packet Scheduling" IEEE Infocom 1996 http://citeseer.nj.nec.com/cache/papers/cs/16896/ftp:zSzzSzftp.ccs.neu.eduSzpubSzpeoplezSzmmattazSzWirelesszSzPravinInfo96.pdf/bhagwat96enhancing.pdf		
		R. Kautz and A. L. Garcia, "A Distributed Self-Clocked Fair Queueing Architecture for Wireless ATM Networks".		
		Wu, et al., "Fair Scheduling with Bottleneck Consideration in Wireless Ad-hoc Networks		
		NS: Network Simulator", http://www.isi.edu/nsnam/ns .		
		A. K. Parekh and R.G. Gallager, "A Generalized Processor Sharing Approach to Flow Control in Integrated Services Networks", in <i>Proc. IEEE Infocom'93</i> , pages 521-530, 1993. http://www.tecknowbasic.com/thesis.pdf http://www.comsoc.org/livepubs/50_journals/pdf/RightsManagement_eid=190987.pdf		
		A. K. Parekh and R. G. Gallager, "A generalized processor sharing approach to flow control in integrated services networks", in <i>Proc. IEEE Infocom'92</i> , pages 915-924, 1992.		
		Liu and Layland, "Scheduling Algorithms for Multiprogramming in a Hard-Real-Time Environment," J. of the ACM 20(1), 1973. * http://www.cs.wustl.edu/~venkita/publications/class/LiuLayland.pdf		



		Bennett and Zhang, "Worst case fair weighted fair queuing", INFOCOM 96. http://citeseer.nj.nec.com/cache/papers/cs/2900/http:zSzzSzwww.cs.wisc.eduSz~lhzSzcs740zSzpaperszSzwf2q.pdf/zhang96wfq.pdf	
		Hui Zhang and Domenico Ferrari, "Rate-Controlled Static-Priority Queuing," IEEE INFOCOM '93. http://citeseer.nj.nec.com/cache/papers/cs/16848/ftp:zSzzSzftp.icsi.berkeley.eduSzpubSztechreportsSz1992zSztr-92-003.pdf/zhang93ratecontrolled.pdf	
		VIC: LBNL's video conferencing tool, http://www-nrg.ee.lbl.gov/vic/	
		M. Podolsky, M. Vetterli, and S. McCanne, "Limited retransmission of real-time layered multimedia," Proc. IEEE Workshop on Multimedia Signal Processing, Dec. 1998.	
		K. Nichols, S. Blake, F. Baker and D. Black, "Definition of the Differentiated Services Field (DS) in the IPv4 and Ipv6 headers", RFC 2474, Dec 1998. http://www.ietf.org/rfc/rfc2474.txt	
		S. Blake, D. Black, M. Carlson, E. Davies, Z. Wang and W. Weiss, "An Architecture for Differentiated Services", RFC 2475, Dec 1998. http://www.ietf.org/rfc/rfc2475.txt	
		S. Shenker and J. Wroclawski, "General Characterization Parameters for Integrated Service Network Element", RFC 2215, Sep 1997 http://www.ietf.org/rfc/rfc2215.txt	
		Sandeep Bajaj, Lee Breslau and Scott Shenker, "Is Service Priority Useful in Packet Networks?", <i>Proceedings of ACM Sigmetrics '98</i> , pages 66-77, Madison, Wisconsin, June, 1998. http://citeseer.nj.nec.com/cache/papers/cs/1710/http:zSzzSzwww.cs.wpi.eduSz~sigmet98zSzabaj.pdf/bajaj98is.pdf	
		Whay C. Lee and Michael G. Hluchyj, "Dynamic Connection Management for Call-Level QOS Guarantee in Integrated Communication Networks," IEEE INFOCOM, 1994.	

Examiner Signature		Date Considered	

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¹ Unique citation designation number. ² Applicant is to place a check mark here if English Language Translation is attached.

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